

Lecture Module - Electrical Instruments

ME3023 - Measurements in Mechanical Systems

Mechanical Engineering

Tennessee Technological University

Topic 3 - Measuring Time Varying Signals

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- Using a Function Generator
- Using an Oscilloscope
- Pros, Cons, and Pitfalls
- Activity

Using a Function Generator

- Primary Purpose:



- Limitations:



Using a Function Generator



Using an Oscilloscope

- Primary Purpose:

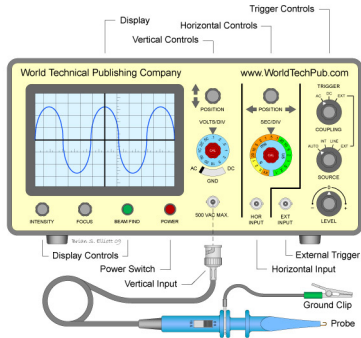


- Limitations:

Using an Oscilloscope



Using an Oscilloscope



Pros, Cons, and Pitfalls

Function Generator:



Pros:

Cons:

Pitfalls:

Pros, Cons, and Pitfalls



Oscilloscope:

Pros:

Cons:

Pitfalls:

Activity

Activity: Wire the system on the next slide to accomplish to the following:

- 1 Generate a sinusoidal signal $y(t)$ using the function generator
- 2 Measure and display the signal $y(t)$ using the oscilloscope
- 3 Measure the amplitude of the signal $y(t)$ using the multimeter

Activity

Activity:

